

REMARKS

Claims 9-38 are pending, with claims 9, 11, 15, and 17 being independent. Claims 9, 11, 15, and 17 have been amended and claims 29-38 have been added. Support for these amendments and new claims can be found in the originally-filed specification, at least at page 3, line 31 to page 4, line 22 and Figs. 1-3. No new matter has been introduced.

Claim Rejections Under 35 U.S.C. §102

Claims 9, 10, 14-16, 20-23, and 25-27 have been rejected as being allegedly anticipated by U.S. Patent No. 4,518,232 (Dagenais). Applicant requests withdrawal of this rejection because Dagenais fails to describe or suggest a telescope including a mirror positioned to adjust the optical axis of the laser beam within the telescope such that the optical axis of the laser beam exiting the telescope is parallel with the optical axis of the laser beam entering the telescope, as now recited in independent claims 9 and 15.

In Dagenais, if the mirror 11 is considered a part of the telescope, then the mirror 11 would fail to adjust an optical axis of the laser beam 10 within the telescope such that the optical axis of the laser beam 10 exiting the telescope is parallel with a telescope axis, which is also parallel with an optical axis of the laser beam entering the telescope. Dagenais' mirror 11 adjusts the optical axis of the laser beam 10 within the telescope such that the optical axis of the laser beam 10 impinging upon the image plane 19 is parallel with a center axis 15. However, the center axis 15 is not also parallel with the optical axis of the laser beam 10 entering the telescope, that is, the optical axis of the laser beam 10 before the laser beam impinges upon the mirror 11 (which would be the case if the mirror 11 is considered to be a part of the telescope). As the Examiner agrees, the optical axis of the laser beam 10 impinging upon the mirror 11 is at 90 degrees relative to the optical axis of the laser beam impinging upon the image plane 19.

On the other hand, if the mirror 11 is not considered a part of Dagenais' telescope, then Dagenais' telescope would lack a mirror that is positioned to adjust an optical axis of a laser beam in this manner.

The Examiner notes at Paragraph 5 of the pending office action that the new axis created by the mirror 11 (that is, the optical axis of the laser beam that is reflected from the mirror 11) is parallel to the optical axis of the laser beam leaving Dagenais' telescope. Applicant does not disagree that the optical axis of the laser beam reflected from the mirror 11 is parallel with the optical axis of the laser beam impinging upon the image plane 19. However, the laser beam reflected from the mirror 11 is not the laser beam entering Dagenais' telescope. And, because claims 9 and 15 require that the mirror be included in the telescope (in that the telescope comprises, among other features, a mirror), Dagenais' mirror 11 could not be positioned to adjust the optical axis in the manner recited in claims 9 and 15.

Accordingly, independent claims 9 and 15 are allowable over Dagenais. Dependent claims 10, 14, 16, 20-23, and 25-27 depend from one of the independent claims, and are allowable for at least the reasons that claims 9 and 15 are allowable.

Claim Rejections Under 35 U.S.C. §103

Claims 12, 13, 18, and 19 have been rejected as being allegedly unpatentable over Dagenais in view of U.S. Patent No. 4,749,840 (Piwczyk). Claims 12, 13, 18, and 19 depend from claims 9 or 15, which were rejected as being anticipated by Dagenais. As discussed above, Dagenais fails to describe or suggest a telescope including a mirror positioned to adjust an optical axis of a laser beam within the telescope such that the optical axis of the laser beam exiting the telescope is parallel with a telescope axis, which is also parallel with an optical axis of the laser beam entering the telescope, as recited in independent claims 9 and 15. Moreover, Piwczyk does not remedy the failure of Dagenais to describe or suggest this subject matter.

In Piwczyk, a laser 1 produces a laser beam that enters the optical system 4 along an optical system axis 10 and is partially reflected at mirror 21 such that the optical axis 11 of the reflected beam is at 90 degrees relative to the optical system axis 10. See Piwczyk at Fig. 1. The reflected beam travels along the optical system axis 10 through an objective lens system 5 and impinges upon a work piece 3 along the optical axis 11. See Piwczyk at Fig. 1. However, Piwczyk's mirror 21 is not positioned to adjust an optical axis of the laser beam within the optical system 4 and the objective lens system 5 such that the optical axis of the laser beam exiting the telescope (that is, impinging upon the work piece 3) is parallel with a telescope axis that is also

parallel with the optical system axis 10 (which is the optical axis of the laser beam entering the optical system 4.

Accordingly, claims 9 and 15 are allowable over any proper combination of Dagenais and Piwczyk, and claims 12, 13, 18, and 19 are allowable for at least the reasons that claims 9 and 15 are allowable.

Claims 11, 17, 24, and 28

Applicant thanks the Examiner for indicating that claims 11, 17, 24, and 28 recite allowable subject matter. Applicant has, in accordance with the Examiner's suggestion, rewritten claims 11 and 17 in independent form including all of the limitations of their respective base claims. Accordingly, claims 11 and 17 are in condition for allowance.

New Claims 29-38

New claims 29-38 depend from claims 9 and 15, and are allowable for at least the reasons that claims 9 and 15 are allowable, and for containing allowable subject matter in their own right. For example, claims 29 and 30 recite that the mirror is positioned to adjust the optical axis of the laser beam that impinges upon the mirror such that the optical axis of the laser beam impinging upon the mirror and the optical axis of the laser beam exiting the telescope are both parallel with the telescope axis. Neither Dagenais, Piwczyk, nor any proper combination of the two describes or suggests such a mirror. In Dagenais, the mirror 11 is positioned such that the optical axis of the laser beam 10 impinging upon the mirror 11 is at 90 degrees relative to the optical axis of the laser beam impinging upon the image plane 19.

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Conclusion

Applicants respectfully request the Examiner to reconsider the pending rejections and allow the pending claims. The fee in the amount of \$1150 in payment of the two-month extension of time fee (\$450) and the excess claim fees (\$700) is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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